

Bridges to Excellence®
Hypertension Care
Recognition Program Guide

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INTRODUCTION

Altarum is excited to offer the opportunity for clinicians to participate in the Bridges to Excellence (BTE) recognition program and its automated EMR/Registry performance assessment system. The BTE EMR/Registry performance assessment system allows for rapid and independent medical record-based clinician performance evaluations by connecting local and national medical record data sources to a network of performance assessment organizations. Altarum's goals are to: reduce the reporting burden for clinicians; leverage existing reporting/data aggregation initiatives; reduce data collection and reporting costs; facilitate the connection between quality improvement and incentives; and speed up cycle times between reporting, improvement and reporting. Clinicians who meet BTE performance thresholds may be eligible for BTE incentives through participating health plans, employers and coalitions.

The Hypertension Care Recognition Program is a BTE Clinician Recognition Program intended to identify clinicians who deliver high-value hypertension care to adult patients. The program is designed with an understanding that adult patients may seek the care of various types of practitioners— primary care (PCPs), cardiologists, nephrologists and others—for treatment and management of their hypertension. Accordingly, the measures reflect that clinicians should do the following.

- Deliver high-quality care from the outset of patient contact
- Understand and consider previous treatment history to help avoid inappropriate treatment

The program comprises a set of measures, based on available clinical evidence, that promote a model of care that includes the following criteria.

- Comprehensive patient assessment and reassessment
- Patient education
- Shared decision making

BTE's Hypertension Care requirements assess clinical measures representing standards of care for patients with hypertension. Altarum believes that the BTE Hypertension Care Recognition program has the potential to significantly improve the quality of care experienced by patients with hypertension and to reduce the financial and human burden of long-term complications due to hypertension.

To earn Hypertension Care Recognition, clinicians and medical practices voluntarily submit medical record data documenting their delivery of care to patients with hypertension. BTE has partnered with an objective third-party independent Performance Assessment Organization (PAO) to evaluate clinician data based on standard measures to publicly recognize those that meet the BTE Hypertension Care performance thresholds. Those clinicians not meeting the BTE Hypertension Care performance thresholds remain anonymous to BTE and its health plan licensees. BTE's Hypertension Care Recognition Program has three performance thresholds, which give physicians star ratings, based on their performance compared to their peers.

Clinician Benefits of Recognition

- Clinicians can demonstrate to the public and to their professional peers that they meet the standards of care assessed by the program by issuing a press release, as well as having their recognition achievements posted on BTE's web site www.bridgestoexcellence.org and communicated to both health plans and employers.
- Clinicians may use the BTE Recognition to demonstrate that they meet the standards of care assessed by the program when contracting with health organizations and purchasers of health services.
- Clinicians can identify areas of their practice that vary from the performance criteria and take steps to improve quality of care.
Where applicable, clinicians can establish eligibility for pay-for-performance bonuses or differential reimbursement or other incentives from payers and health plans.

Background on the Measurement Criteria

Eligible clinicians and medical practices voluntarily apply for BTE Recognition by submitting information on how they treat and manage their patients with regard to the following.

Clinical Measures¹

1. Blood Pressure (BP) Control in Patients age ≥ 60
2. Blood Pressure Control in Patients < 60
3. Documentation of Blood Pressure Measurement Twice Annually
4. Blood Pressure Management in Patients with CKD
5. Prescribing ACEI/ARBs in Hypertensive Patients with CKD
6. Blood Pressure Management in Diabetics
7. Blood Pressure Management in Patients with Poorly Controlled Hypertension – Pharmacotherapy
8. Documentation of Annual Urine Protein Test
9. Documentation of Annual Serum Creatinine Test – Renal Function Tests
10. Documentation of Tobacco status
11. Documentation of Tobacco Cessation counseling if user – and Treatment
12. Body Mass Index calculated
13. Documentation of Counseling for Diet, Salt Intake and Physical Activity

Clinicians who demonstrate high-quality performance based on these measures are awarded BTE Hypertension Care Recognition.

¹ Clinical measures evaluate performance based on care provided to a sample of individual patients and documented in the medical records of those patients. Clinical measures are scored based on the percentage of the sample (denominator) which meet or comply (numerator) with the measure threshold.

Recognition Program Structure

Given the evidence in the literature advocating the creation of clinician quality reward programs that promote continuous quality improvement amongst its participants. The BTE Hypertension Recognition Program is designed for clinicians to achieve BTE award status based on their performance summed up across all measures.

Assessment for recognition in all 3 tiers is based upon data submitted on the same Hypertension measures (listed above).

Three Stars: Focuses on a clinician-centric view of measurement, looking at individual metrics summed to produce a composite score. Program recognition threshold has been set to focus on above average performance.

Four Stars: Similar in design to Level I with the exception that the program recognition threshold is set to focus on very good performance.

Five Stars: Similar in design to Level II and I with the exception that the program recognition threshold is set to focus on exceptional performance.

What Recognition Requires

To seek BTE Hypertension Care Recognition, clinician applicants must submit medical record data that demonstrates they meet BTE's Hypertension Care performance requirements. Each measure has an assigned maximum available point value (Table 1). A clinician achieves points for a measure based on the percentage of his or her patient sample that meets or exceeds the set thresholds for that measure.

Performance Assessment Organizations (PAOs) award recognition to clinicians who achieve at minimum:

3-Stars:	50 th - 64 th percentile
4-stars:	65 th - 84 th percentile
5-stars:	85 th percentile and above

Recognition is based on clinician performance relative to their peers. The Star Ratings are determined by overall point score and is graded on a validated bell curve. The Raw Score equivalents will be published on an annual basis.

Table 1: Hypertension Care Measures, Performance Criteria and Scoring

Measure	Total Possible	Level of Evidence	Source
Blood Pressure (BP) Control in Patients age > 60	20	A	JNC
Blood Pressure Control in Patients < 60	20	A-E	JNC
Blood Pressure Measurement Twice Annually	5	E	JNC
Blood Pressure Management in Patients with CKD	10	E	JNC
ACEI/ARB Therapy in Hypertensive Patients with CKD	10	B	JNC
Blood Pressure Management in Diabetics	5	E	JNC
Blood Pressure Management in Patients with Poorly Controlled Hypertension - Pharmacotherapy	10	B	JNC
Documentation of Annual Urine Protein Test	2.5	None	Gold Standard
Documentation of Annual Serum Creatinine Test – Renal Function Tests	2.5	None	Gold Standard
Documentation of Tobacco Use Status	2.5	A	AHA/JNC
Documentation of Tobacco Cessation counseling if user – and Treatment	5	A	AHA/JNC
Body Mass Index calculated	2.5	A	AHA/JNC
Documentation of Counseling for Diet, Salt Intake and Physical Activity	5	A	AHA
Total Possible Points	100		

HTN=Hypertension
 BMI= Body Mass Index
 CKD=Chronic Kidney Disease
 ADA= American Diabetes Association
 AHA= American Heart Association
 JNC= Joint National Committee

Eligibility for Clinician Participation

Clinicians may apply for BTE Hypertension Care Recognition as individuals or part of a medical practice. To be eligible, applicants must meet the following criteria.

- Applicants must be licensed as a medical doctor (M.D. or D.O.), nurse practitioner (N.P.), or physician assistant (P.A.).
- Applicants must provide continuing care for patients with hypertension and must be able to meet the minimum patient sample sizes.
- Applicants must complete all application materials and agree to the terms of the program by executing a data use agreement and authorization with a data aggregator partner.
- Applicants must submit the required data documenting their delivery of care for all eligible patients in their full patient panel.
- Applicants must use PAO-supplied or approved methods for submitting data electronically.

Individual Clinician Applicant

An individual clinician applicant represents one licensed clinician practicing in any setting who provides continuing care for patients with hypertension.

Medical Practice Applicant

A medical practice applicant represents any practice with three or more licensed clinicians who, by formal arrangement, share responsibility for a common panel of patients and practice at the same site, defined as a physical location or street address. For purposes of this assessment process practices of two clinicians or less must apply as individual applicants.

Minimum Requirements

To be eligible for recognition, clinicians must have a minimum of 25 patients for the denominator for individual clinician applicants, and a minimum of 10 patients for the denominator for each individual clinician in a practice level applicant, with a minimum practice average of 25 patients per clinician.

Table 1 shows the program measures and the associated point values for scoring clinicians' performance.

How to Submit for Recognition

BTE is a Performance Assessment Organization (PAO) for all Bridges to Excellence (BTE) Recognition Programs submitted electronically or direct data submission through the Bridges to Excellence (BTE) web portal or via an EMR Partner listed below. Clinicians will be provided with performance assessments, feedback reports, and access resources to help them close performance gaps.

EMR Partners

Altarum has worked with many EMR Vendors to streamline the process for users wishing to submit their data for BTE recognition. Contact information for EMR companies who have completed certification as a Data Aggregator can be found below:

Vendor	Contact Information
Athena Health	bte@athenahealth.com
eClinicalWorks	incentiveprograms@eclinicalworks.com
Meridios	info@meridios.com
MediTab	info@meditab.com

BTE Hypertension Care Recognition Clinical Measures

The following examples illustrate the format used for clinical measures.

Evaluation Program Title: Hypertension Care Recognition Program

Clinical Measures

Clinical measures are standard measures with a numerator and denominator that reflect performance across a sample of eligible patients based on claims/encounter data and medical record documentation.

The following items are listed for each clinical measure.

- Description:** A statement of what is being measured specifically.
- Data Source:** A list of the data sources accepted for the clinical measure.
- Explanation:** Additional information about the clinical measure.
- Denominator:** A description of a subset of the applicant’s eligible patients (domain denominator) for whom a particular measure is relevant (measure denominator).
- Numerator:** A description of patients in the applicant’s eligible patients (denominator) who meet the measure threshold or standard.
- Frequency:** Time frames associated with the numerator requirements.
- Scoring:** Performance level (percentage of patients meeting or complying with the measure) translated to points total for the clinical measure.

Information on the Domain Denominator is consistent across all the clinical measures and is listed under “Patient Eligibility Criteria”, beginning on page 35.

Hypertension Care Recognition Program Measurement Set

Blood Pressure (BP) Control in Patients age ≥ 60

Description: Percentage of patients aged 60 through 75 years of age with a diagnosis of essential hypertension who had a most recent blood pressure reading measuring less than 150/90 during the reporting period.

Data Source: Electronic data (visit, lab, encounter data, or claims) and/or medical record data (paper-based or EHR). This measure requires the use of claims/encounter or medical record data for identification of patients with essential hypertension for the denominator, and medical record data for blood pressure information for the numerator.

Explanation: The Eighth Report of the Joint National Committee (JNC 8) guidelines on prevention, detection, evaluation, and treatment of high blood pressure suggest that in uncomplicated patients over 60, the blood pressure target should be less than 150/90. For some patients, a lower target may be appropriate. However, there have been significant adverse events when blood pressures are managed too aggressively in this cohort of patients.

Denominator: Patients aged 60-75 years of age with a diagnosis of essential hypertension. See “Patient Eligibility Criteria”, beginning on page 36, for information on codes to identify patients with essential hypertension (Table 2, page 37).

Numerator: Patients in the denominator who have had a most recent systolic blood pressure measurement of < 150 mmHg AND diastolic blood pressure of < 90 mmHg. The steps below should be followed to determine the representative blood pressure reading.

1. Identify the most recent visit to the doctor’s office or clinic in which a BP reading was noted. BP reading is acceptable if the representative BP was obtained during a visit to the clinician’s office or non-emergency outpatient facility, such as clinic or urgent care center.
2. Identify the lowest systolic and lowest diastolic blood pressure reading from the most recent blood pressure notation in the medical record. If there are multiple BPs recorded for a single date, use the lowest systolic and lowest diastolic BP on that date as the representative BP. The systolic and diastolic results do not need to be from the same reading.

The patient is numerator compliant if the most recent systolic blood pressure measurement during the reporting period is < 150 mmHg AND the *most recent diastolic blood pressure measurement* during the reporting period is < 90 mmHg. The patient is **NOT** numerator compliant if the most recent systolic blood pressure measurement is ≥ 150 mmHg or missing, OR the most recent diastolic blood pressure measurement is ≥ 90 mmHg or missing, OR if the BP reading was not done during the reporting period.

The following are not acceptable forms of documentation of blood pressure:

1. Use of terms “VS within normal limits,” “VS WNL,” or “Vital signs normal”
2. BP measurements obtained on the same day as a diagnostic or surgical procedure or at an emergency room visit
3. Patient self-reporting

Frequency: Most recent reading over the last 12 months from the last day of the reporting period.

Scoring: (Numerator/Denominator) * Total Points available

Source and Level of Evidence: JNC8, Level A

Blood Pressure Control in Patients < 60

Description: Percentage of patients aged 18 through 59 years of age with a diagnosis of essential hypertension (HTN) who had a most recent blood pressure reading less than 140/90 during the reporting period.

Data Source: Electronic data (visit, lab, encounter data, or claims) and/or medical record data (paper-based or EHR). This measure requires the use of claims/encounter or medical record data for identification of patients with essential hypertension for the denominator, and medical record data for blood pressure information for the numerator.

Explanation: The Eighth Report of the Joint National Committee (JNC 8) guidelines on prevention, detection, evaluation, and treatment of high blood pressure suggest that in uncomplicated patients age 18-59 with essential HTN, the blood pressure target should be less than 140/90. For some patients, a lower target may be appropriate.

Denominator: Patients aged 18-59 years of age with a diagnosis of essential hypertension. See “Patient Eligibility Criteria”, beginning on page 36, for information on codes to identify patients with essential hypertension (Table 2, page 37).

Numerator: Patients in the denominator who’s most recent systolic blood pressure measurement of < 140 mmHg AND diastolic blood pressure of < 90 mmHg. The steps below should be followed to determine the representative blood pressure reading.

1. Identify the most recent visit to the doctor’s office or clinic in which a BP reading was noted. BP reading is acceptable if the representative BP was obtained during a visit to the clinician’s office or non-emergency outpatient facility, such as clinic or urgent care center.
2. Identify the lowest systolic and lowest diastolic blood pressure reading from the most recent blood pressure notation in the medical record. If there are multiple BPs recorded for a single date, use the lowest systolic and lowest diastolic BP on that date as the representative BP. The systolic and diastolic results do not need to be from the same reading.

DATA Collection: The patient is numerator compliant if the *most recent systolic blood pressure measurement* during the reporting period is < 140 mmHg AND the most recent diastolic blood pressure measurement during the reporting period is < 90 mmHg. The patient is NOT numerator compliant if the most recent systolic blood pressure measurement is \geq 140 mmHg or missing, OR the most recent diastolic blood pressure measurement is \geq 90 mmHg or missing, OR if the BP reading was not done during the reporting period.

The following are not acceptable forms of documentation of blood pressure:

1. Use of terms “VS within normal limits,” “VS WNL,” or “Vital signs normal”
2. BP measurements obtained on the same day as a diagnostic or surgical procedure or at an emergency room visit
3. Patient self-reporting

Frequency: Most recent reading over the last 12 months from the last day of the reporting period.

Scoring: (Numerator/Denominator) * Total Points available

Source and Level of Evidence: JNC8

LOE:

- Grade A for diastolic goal ages 30-59
- Grade E for diastolic goal ages 18-29
- Grade E for systolic goal 18-59

Documentation of Blood Pressure Measurement Twice Annually

- Description:** Percentage patients aged 18 through 75 years of age with a diagnosis of hypertension who had their blood pressure measured twice annually during the reporting period.
- Data Source:** Electronic data (visit, lab, encounter data, or claims) and/or medical record data (paper-based or EHR). This measure requires the use of claims/encounter or medical record data for identification of patients with hypertension who have had 2 blood pressure measurements, at least 90 days apart during the last 12 months from the reporting period
- Explanation:** JNC/AHA 2015 guidelines recommend that all hypertensive patients age 18-75 have their blood pressure measured and documented at least twice annually to determine control and make necessary adjustments to lifestyle and medications.
- Denominator:** See “Patient Eligibility Criteria”, beginning on page 36, for information on codes to identify patients with essential hypertension (Table 2, page 37).
- Numerator:** Patients in the denominator who have had at least 2 blood pressure measurements within the reporting period. The measurements must be separated by at least 90 days.
- DATA Collection:** The hypertensive patient is numerator compliant if he or she has had 2 blood pressure measurements (separated by at least 90 days) documented during the reporting period.
- Exclusions:** Patients with terminal illness, patients on hospice.
- Frequency:** Blood pressure reading documented twice and 90 days apart, within the 12 months prior to the last day of the reporting period.
- Scoring:** (Numerator/Denominator) * Total Possible Points
- Source and Level of Evidence:** JNC8/AHA, Grade B

Blood Pressure Management in Patients with CKD

- Description:** Percentage of patients aged 18 through 75 years of age with a diagnosis of hypertension and chronic kidney disease (CKD) whose most recent blood pressure reading was less than 140/90 during the reporting period.
- Data Source:** Electronic data (visit, lab, encounter data, or claims) and/or medical record data (paper-based or EHR). This measure requires the use of claims/encounter or medical record data for identification of patients with essential hypertension for the denominator, and medical record data for blood pressure information for the numerator.
- Explanation:** The Eighth Report of the Joint National Committee (JNC 8) guidelines on prevention, detection, evaluation, and treatment of high blood pressure suggest that in patients age 18-75 with essential HTN and CKD, the blood pressure target should be less than 140/90.
- Denominator:** See “Patient Eligibility Criteria”, beginning on page 36, for information on codes to identify patients with essential hypertension (Table 2, page 37) and chronic kidney disease (CKD) (Table 4, page 38).
- Numerator:** Patients in the denominator who’s most recent systolic blood pressure measurement is < 140 mmHg AND diastolic blood pressure of < 90 mmHg. The steps below should be followed to determine the represented blood pressure reading.

1. Identify the most recent visit to the doctor’s office or clinic in which a BP reading was noted. BP reading is acceptable if the representative BP was obtained during a visit to the clinician’s office or non-emergency outpatient facility, such as clinic or urgent care center.
2. Identify the lowest systolic and lowest diastolic blood pressure reading from the most recent blood pressure notation in the medical record. If there are multiple BPs recorded for a single date, use the lowest systolic and lowest diastolic BP on that date as the representative BP. The systolic and diastolic results do not need to be from the same reading.

DATA Collection: The patient is numerator compliant if the most recent systolic blood pressure measurement during the reporting period is < 140 mmHg AND the most recent diastolic blood pressure measurement during the reporting period is < 90 mmHg. The patient is NOT numerator compliant if the most recent systolic blood pressure measurement is \geq 140 mmHg or missing, OR the most recent diastolic blood pressure measurement is \geq 90 mmHg or missing, OR if the BP reading was not done during the reporting period.

The following are not acceptable forms of documentation of blood pressure:

1. Use of terms “VS within normal limits,” “VS WNL,” or “Vital signs normal”
2. BP measurements obtained on the same day as a diagnostic or surgical procedure or at an emergency room visit
3. Patient self-reporting

Frequency: Most recent reading over the last 12 months from the last day of the reporting period.

Scoring: (Numerator/Denominator) * Total Points available

Source and Level of Evidence: JNC8, Grade E

Prescribing ACEI/ARBs in Hypertensive Patients with CKD

- Description:** Percentage of patients aged 18 through 75 years of age who have a diagnosis of hypertension and chronic kidney disease (CKD) AND are prescribed an Angiotensin Converting Enzyme Inhibitor (ACEI), Angiotensin Receptor Blocker (ARB), OR have a documented contraindication or medication allergy during the reporting period.
- Data Source:** Electronic data (visit, lab, encounter data, or claims) and/or medical record data (paper-based or EHR). This measure requires the use of claims/encounter or medical record data for identification of patients with hypertension and CKD for the denominator, and claims/encounter and medical record data that states that these patients are prescribed ACEI/ARB medication.
- Explanation:** JNC-8 guidelines recommend that all hypertensive patients age 18-75 with CKD be prescribed an ACEI or ARB for renal protection and BP control, unless contraindicated.
- Denominator:** See “Patient Eligibility Criteria”, beginning on page 36, for information on codes to identify patients with essential hypertension (Table 2, page 37) and chronic kidney disease (CKD) (Table 4, page 38).
- Numerator:** Patients in the denominator who are on an ACEI or ARB (Medications may be found starting on page 39 under “Relevant Medication Lists for Hypertension Care Measurement Set”) unless allergy or contraindication is recorded in chart.
- DATA Collection: The patient is numerator compliant if patient has a diagnosis of hypertension and CKD and is prescribed an ACEI or ARB medication.
- Exclusions:** ESRD, dialysis patients, ARB/ACEI allergy or documented contraindication
- Frequency:** Most recent documentation of ACEI/ARB use in hypertensive patients with CKD within the 12 months prior to the last day of the reporting period.
- Scoring:** (Numerator/Denominator) * Total Possible Points
- Source and Level of Evidence:** JNC8, Grade B

Blood Pressure Management in Diabetics

Description: Percentage of patients aged 18 through 75 years of age with a diagnosis of hypertension (HTN) and diabetes (DM) who had an appropriate control of blood pressure (less than 140/90) during the reporting period.

Data Source: Electronic data (visit, lab, encounter data, or claims) and/or medical record data (paper-based or EHR). This measure requires the use of claims/encounter, pharmacy or medical record data for identification of patients with hypertension and diabetes for the denominator, and medical record data for blood pressure information for the numerator.

Explanation: American Diabetes Association (ADA) 2015 guidelines and JNC8 guidelines recommend blood pressure of <140/90 mmHg as a treatment goal for all adults with diabetes. It is anticipated that clinicians who provide services for the primary management of hypertension and diabetes will submit this measure.

Denominator: See “Patient Eligibility Criteria”, beginning on page 36, for information on codes to identify patients with essential hypertension (Table 2, page 37) and those that have diabetes (Table 5, page 35).

Numerator: Patients in the denominator with a most recent systolic blood pressure measurement of < 140 mmHg AND diastolic blood pressure of < 90 mmHg. The steps below should be followed to determine the representative blood pressure reading.

1. Identify the most recent visit to the doctor’s office or clinic in which a BP reading was noted. BP reading is acceptable if the representative BP was obtained during a visit to the clinician’s office or non-emergency outpatient facility such as a cardiology/endocrine office or urgent care center.
2. Identify the lowest systolic and lowest diastolic blood pressure reading from the most recent blood pressure notation in the medical record. If there are multiple BPs recorded for a single date, use the lowest systolic and lowest diastolic BP on that date as the representative BP. The systolic and diastolic results do not need to be from the same reading, but must be from the same date.

DATA Collection: The patient is numerator compliant if the patient has a diagnosis of hypertension and if the most recent systolic blood pressure measurement during the reporting period is < 140 mmHg AND the most recent diastolic blood pressure measurement during the reporting period is < 90 mmHg. The patient is NOT numerator compliant if the most recent systolic blood pressure measurement is \geq 140 mmHg or missing, OR the most recent diastolic blood pressure measurement is \geq 90 mmHg, or if either result is missing, OR if the BP reading was not done during the reporting period.

The following are NOT acceptable forms of documentation of blood pressure:

1. Use of terms “VS within normal limits,” “VS WNL,” or “Vital signs normal”
2. BP measurements obtained on the same day as a diagnostic or surgical procedure or at an emergency room visit

3. Patient self-reporting

Frequency: Most recent reading within 12 months prior to the last day of the reporting period.

Scoring: (Numerator/Denominator) * Total Possible Points

Source and Level of Evidence: ADA/JNC8, Level A/Grade E

Blood Pressure Management in Patients with Poorly Controlled Hypertension - Pharmacotherapy

- Description:** Percentage of patients 18 through 75 years of age with a diagnosis of hypertension (HTN) who require pharmacotherapy and are prescribed a thiazide, ACEI/ARB or calcium channel blocker (CCB) during the reporting period.
- Data Source:** Electronic data (visit, lab, encounter data, or claims) and/or medical record data (paper-based or EHR). This measure requires the use of claims/encounter or medical record data for identification of patient's with essential hypertension for the denominator, and claims/encounter and medical record data, which states that these patients are prescribed thiazides, ACEI/ARB or calcium channel blocker (CCB) medication.
- Explanation:** The Eighth Report of the Joint National Committee (JNC 8) guidelines on prevention, detection, evaluation, and treatment of high blood pressure suggest that in patients age 18-75 with essential HTN a thiazide, ACEI/ARB, or CCB should be used if pharmacologic treatment is indicated. Beta-blockers should not be used as first line treatment of hypertension.
- Denominator:** See "Patient Eligibility Criteria", beginning on page 36, for information on codes to identify patients with essential hypertension (Table 2, page 37) and who are on any blood pressure pharmacotherapy (Tables 6-12, pages 36-42) are the denominator for this measure.
- Numerator:** Patients in the denominator who are prescribed a thiazide, ACEI/ARB, or calcium channel blocker (CCB)
- Frequency:** Medication must have been prescribed within the last year
- Scoring:** (Numerator/Denominator) * Total Points available
- Source and Level of Evidence:** JNC8, Grade B

Documentation of Annual Urine Protein Test

- Description:** Percentage of patients aged 18 through 75 years of age with a diagnosis of hypertension (HTN) who had evidence of nephropathy or went through a nephropathy screening during the reporting period.
- Data Source:** Electronic data (visit, lab, encounter data, or claims) and/or medical record data (paper-based or EHR). This measure requires the use of claims/encounter, pharmacy or medical record data for identification of patients with hypertension for the denominator, and claims/encounter, pharmacy, laboratory or medical record data for nephropathy diagnosis, medical treatment or screening information for the numerator.
- Explanation:** JNC8 Guidelines recommend testing for adult patients with hypertension to detect nephropathy in patients with no known history of nephropathy. It is anticipated that clinicians who provide services for the primary management of hypertension will submit this measure.
- Denominator:** See “Patient Eligibility Criteria”, beginning on page 36, for information on codes to identify patients with essential hypertension (Table 2, page 37).
- Numerator:** Patients in the denominator with documentation of evidence of nephropathy or nephropathy screening.

DATA Collection: The patient is numerator compliant if the patient has a diagnosis of hypertension and has evidence of nephropathy or screening for nephropathy, as identified by claims or pharmacy data. This includes those patients with hypertension who had one of the following:

1. Evidence of nephropathy diagnosis or medical treatment for nephropathy during the patient’s lifetime.
2. Nephropathy screening during the reporting period.

Evidence of Nephropathy: Documentation in the medical record must include diagnosis of or medical treatment for one of the following during the patient’s lifetime:

1. Hypertensive Nephrosclerosis
2. Chronic renal failure (CRF)
3. Chronic Renal insufficiency
4. Chronic Kidney Disease (CKD)
5. Chronic renal disorder
6. Proteinuria
7. Azotemia
8. Microalbuminuria

Evidence of Nephropathy: The following codes may be used to identify nephropathy diagnosis:
 ICD-9-CM Codes : 403, 404, 405.01, 405.11, 405.91, 581.81, 582.9, 583, 585, 587, 588, 791.0
 ICD-10 Codes: N14.0 – N14.4, N15.0, N13.71, N07.0 - N07.9, E08.21, E09.21, E10.21, E11.21, E13.21, A36.84

CPT code: 3062F, 3066F, 3082F - 3084F

Nephropathy Screening: Documentation in the medical record must include the date on which the screening test was performed, and the test result that has been reviewed is within the 12 months, prior to the last day of the reporting period. Notation of the following may count for microalbuminuria screening test:

- 24-hour urine for microalbumin
- Timed urine for microalbumin
- Spot urine for micro albumin
- Microalbumin/Creatine ratio
- 24-hour urine for total protein
- Random urine for protein/creatinine ratio

Nephropathy Screening: The following codes may be used to identify nephropathy-screening tests:

Microalbuminuria Test: 81005, 81015, 81050, 81099, 82042, 82043, 82044 81000-81003, 81005.

Notation of the following may count for macroalbuminuria screening test:

- Positive result on urine dipstick
- CPT code: 3062F, 3066F, 3082F - 3084F

Note: A negative result on urine dipstick is insufficient for numerator compliance.

The following is not acceptable documentation for nephropathy assessment:

- Patient self-reporting

Frequency: If patient with diagnosis of or medical treatment for nephropathy: during patient lifetime.

Scoring: (Numerator/Denominator) * Total Possible Points

Source and Level of Evidence: Expert Opinion/Gold Standard

Documentation of Annual Serum Creatinine Test – Renal Function Tests

- Description:** Percentage of patients aged 18 through 75 years of age with a diagnosis of hypertension (HTN) who had a blood creatinine lab test within the past year.
- Data Source:** Electronic data (visit, lab, encounter data, or claims) and/or medical record data (paper-based or EHR). This measure requires the use of claims/encounter or medical record data for identification of patients with essential hypertension for the denominator, and claims/encounter, laboratory or medical record data for renal function testing for the numerator.
- Explanation:** The Eighth Report of the Joint National Committee (JNC 8) guidelines on prevention, detection, evaluation, and treatment of high blood pressure suggest that in patients age 18-75 with essential HTN, a blood creatinine level should be checked annually to monitor for kidney damage.
- Denominator:** Patients aged 18-75 years with the diagnosis of essential hypertension. See “Patient Eligibility Criteria”, beginning on page 36, for information on codes to identify patients with essential hypertension (Table 2, page 37).
- Numerator:** Patients in the denominator who have had a blood creatinine level checked in the past year.
- CPT I Codes: 80047, 80048, 80050, 80053, 80069, 82565, 82570, 82575
- Frequency:** Most recent lab value over the last 12 months from the last day of the reporting period.
- Scoring:** (Numerator/Denominator) * Total Points available
- Source and Level of Evidence:** Expert Opinion/Gold Standard

Documentation of Tobacco Status

- Description:** Percentage of patients aged 18 through 75 years of age with a diagnosis of hypertension (HTN) whose tobacco use status is documented during the reporting period.
- Data Source:** Electronic data (visit, lab, encounter data, or claims) and/or medical record data (paper-based or EHR). This measure requires the use of claims/encounter, pharmacy or medical record data for identification of patients with hypertension for the denominator, and medical record data for documentation of tobacco use status information for the numerator.
- Explanation:** JNC-8 guidelines recommend that hypertensive patients do not use tobacco products and that those who do receive cessation counseling and treatment. It is anticipated that clinicians who provide services for the primary management of hypertension will submit this measure.
- Denominator:** See “Patient Eligibility Criteria”, beginning on page 36, for information on codes to identify patients with essential hypertension (Table 2, page 37).
- Numerator:** Patients in the denominator with documentation of tobacco use status.
- The patient is NOT numerator compliant if:
1. His or her tobacco use status documentation is missing.
 - OR
 2. His or her tobacco status was not asked.
- Frequency:** Most recent tobacco use status over the last 12 months from the last day of the reporting period.
- Scoring:** (Numerator/Denominator) * Total Possible Points
- Source and Level of Evidence:** ACC/AHA, Level A

Documentation of Tobacco Cessation Counseling if user – and Treatment

Description: Percentage of patients aged 18 through 75 years of age with a diagnosis of hypertension (HTN) who use tobacco and have received cessation counseling or treatment during the reporting period.

Data Source: Electronic data (visit, lab, encounter data, or claims) and/or medical record data (paper-based or EHR). This measure requires the use of claims/encounter, pharmacy or medical record data for identification of patients with hypertension that use tobacco for the denominator, and for documentation of cessation counseling or treatment for the numerator.

Explanation: JNC-8 guidelines recommend that hypertensive patients do not use tobacco products, and that those who do, received cessation counseling and treatment. It is anticipated that clinicians who provide services for the primary management of hypertension will submit this measure.

Denominator: See “Patient Eligibility Criteria”, beginning on page 36, for information on codes to identify patients with essential hypertension (Table 2, page 37) and who are current users of tobacco products.

Numerator: Patients in the denominator who are tobacco users and have received cessation counseling and/or treatment.

DATA Collection: The patient is numerator compliant if the patient has a diagnosis of hypertension and is a tobacco user and has documented date of receipt of cessation counseling and/or treatment during the reporting period, as identified by medical claims data or medical record data. The following codes may be used to identify smoking cessation counseling and/or treatment:

CPT I Codes: 99406, 99407
 CPT II Codes: 4000F, 4001F, 4004F
 HCPCS Codes: S9453, G0436, G0437, G9458

For a list of numerator compliant medications, see Tables 21, pages 46 under “Tobacco Cessation Medications”.

Medical Record Collection: Acceptable forms of cessation counseling and treatment methods/resources include dated documentation of patient receiving/ participating in at least one of the following:

1. 1:1 teaching
2. Written or web-based risk-based educational materials
3. Group education class focused on tobacco cessation
4. Drug therapy

If the patient is a tobacco user, the patient is NOT numerator compliant if:

1. His or her status documentation is missing.
OR
2. His or her tobacco user status was not asked.
OR

-
3. His or her documentation on receiving cessation counseling and/or treatment is missing.
OR
 4. He or she has not received cessation counseling and/or treatment.
OR
 5. He or she has not received cessation counseling and/or treatment during the reporting period.
OR
 6. His or her documentation on receiving cessation counseling and/or treatment is not available during the reporting period.

Frequency: Most recent counseling/treatment within the 12 months prior to the last day of the reporting period.

Scoring: (Numerator/Denominator) * Total Possible Points

Source and Level of Evidence: ACC/AHA, Level A

Body Mass Index Calculated

Description: Percentage of patients aged 18 through 75 years of age with a diagnosis of hypertension (HTN) for whom a documented body mass index (BMI) is calculated during the reporting period.

Data Source: Electronic data (visit, lab, encounter data, or claims) and/or medical record data (paper-based or EHR). This measure requires the use of claims/encounter or medical record data for identification of patients with hypertension for the denominator, and for BMI information for the numerator.

Explanation: JNC8 guidelines recognized that overweight and obesity status are independent risk factors for development and worsening of hypertension. It is anticipated that clinicians who provide services for the primary management of hypertension will submit this measure.

Denominator: See “Patient Eligibility Criteria”, beginning on page 36, for information on codes to identify patients with essential hypertension (Table 2, page 37).

Numerator: Patients in the denominator with a documented BMI calculation.

DATA Collection: The patient is numerator compliant if the patient has a diagnosis of hypertension and a calculation of their BMI documented during the reporting period. The following codes may be used to identify a documented BMI:

CPT II Code: 3008F

HCPCS Codes: G8417-G8420, G8938, G9716

ICD-9: V-Codes: V85.0 BMI less than 19, adult; V85.1 BMI between 19-24, adult; V85.2 BMI between 25-29, adult; V85.3 BMI between 30-39, adult; V85.4 BMI between 40 and over, adult.

ICD-10: Z68.1 BMI less than 19, adult; Z68.20 – Z68.24 BMI between 20-24, adult; Z68.25- Z68.29 BMI between 25-29, adult; Z68.30 – Z68.39 BMI between 30-39, adult; Z68.4 BMI between 40 and over, adult.

Medical Record Collection: Evidence of one of the following is present in the eligible patient’s chart:

1. Documentation of the result of a BMI calculation during the reporting period
2. Documentation in the medical record must include BMI result and exam date.
Calculated BMI – Requires that both the height and weight be actually measured by an eligible professional or by their staff.

The following are not acceptable documentation for documented BMI calculation:

- Patient self-reporting

Not Eligible/Not Appropriate for BMI Measurement –

Patients can be considered not eligible in the following situations:

1. If the patient has a terminal illness – life expectancy less than 6 months
2. If the patient is pregnant
3. Patient physically unable to provide weight.

Frequency: Most recent test result over the last 12 months from last day of the reporting period.

Scoring: $(\text{Numerator}/\text{Denominator}) * \text{Total Points Possible} = \text{Points awarded}$

Source and Level of Evidence: AHA/ACC, Level A

Documentation of Counseling for Diet, Salt Intake and Physical Activity

Description: Percentage of patients aged 18 through 75 years of age with a diagnosis of hypertension (HTN) for whom nutrition and physical activity counseling is performed and documented during the reporting period.

Data Source: Electronic data (visit, lab, encounter data, or claims) and/or medical record data (paper-based or EHR). This measure requires the use of claims/encounter or medical record data for identification of patients with hypertension for the denominator, and for nutrition counseling for the numerator.

Explanation: JNC8 guidelines recognize that even in hypertensive patients with a normal weight, a low salt diet (DASH) is recommended. All individuals who have hypertension should be counseled to eat a low salt diet, be physically active, and achieve a healthy weight. The DASH diet has been shown to decrease systolic blood pressure by approximately 10 points. A PCP, RN, dietician, or nutritionist can perform this counseling. It is anticipated that clinicians who provide services for the primary management of hypertension will submit this measure.

Denominator: See “Patient Eligibility Criteria”, beginning on page 36, for information on codes to identify patients with essential hypertension (Table 2, page 37).

Numerator: Patients in the denominator with documentation of counseling for DASH diet nutrition, DASH Sodium (low salt diet) and for physical activity.

DATA Collection: The patient is numerator compliant if he or she has documentation of DASH nutrition, low salt diet and physical activity counseling.

Medical Record Collection: Evidence of one of the following is present in the eligible patient’s chart:

- Must document that nutritional counseling has been provided for diet, low salt diet and for physical activity counseling.

The following are not acceptable documentation for documented nutritional counseling:

- Patient self-reporting

Frequency: Most recent test result over the last 12 months from last day of the reporting period.

Not Eligible/Not Appropriate for nutritional counseling –

Patients can be considered not eligible in the following situations:

- If the patient has a terminal illness – life expectancy less than 6 months If the patient is pregnant

Scoring: (Numerator/Denominator) * Total Possible Points

Source and Level of Evidence: AHA/ACC, Level A

Recognition Process

Applying for Recognition

Clinician applicants opt to voluntarily submit their data to a PAO for performance assessment through the Hypertension Care Recognition program. Participating clinicians must execute a data use agreement with the data aggregator partner through which they plan to submit data for BTE's automated performance assessment process. All data aggregator partners have data use agreements executed with their partnering PAO. All necessary steps will be taken by the data aggregator and PAO to protect the confidentiality of patient data, as required by The Health Insurance Portability and Accountability Act of 1996 (HIPAA). To assist with clinician compliance with HIPAA, the data aggregator partner provides a Business Associate addendum referenced in the data use agreement, which states that both the data aggregator and the clinician applicant will comply with HIPAA requirements.

Clinicians considering applying for recognition should:

1. Determine eligibility. See "Eligibility for Clinician Participation" for more information.
2. Familiarize themselves with the BTE Hypertension Care measures and specifications. See "What Recognition Requires".
3. Determine whether to apply as an individual clinician or medical practice.

Clinicians submitting through a data aggregator partner are required to submit medical record data for all eligible patients across their full patient population on a quarterly calendar schedule. Clinicians are required to continue submitting data for all eligible patients each quarter unless they cease using the data aggregator's electronic system.

Clinicians that are new to an electronic data aggregator partner's system, where the system is not yet fully integrated in the clinicians' office and patient records have not been back loaded, are required to prospectively enter all eligible patients from their full patient panel into the data aggregator's electronic system. For individual applicants, clinician assessment will automatically be triggered after all required data is submitted through the data aggregator's electronic system for the minimum requirement of 25 eligible patients. For practice level applicants, assessment will automatically be triggered after all required data is submitted through the data aggregator's electronic system for 10 patients per individual clinician and a practice average of 25 patients per clinician. It is assumed that after one full year of usage of the data aggregator's electronic system that all eligible patients will be included.

Completed applications are processed for compliance with performance requirements, and applicant-specific reports with results for all Hypertension Care measures are produced within 30 days. The begin recognition date is calculated based on the date that the applicant's data is scored. BTE issues an official certificate to each recognized clinician or medical practice.

Additionally, BTE reserves the right to complete an audit of any individual or practice application for Recognition. PAO or specified local organization subcontractors conduct audits of at least 5 percent of the recognized clinicians from each data aggregator partner each year. Audits may be completed by fax, mail, electronically or on site, as determined by the PAO. The remainder of the five percent will be identified by a single methodology that randomizes the medical groups who submit to the data aggregator and then sequentially selecting medical groups. The number of medical groups selected is dependent on the total number of recognized clinicians in each medical

group, enough groups will be selected to account for 5% of total recognized clinicians submitted by the data aggregator.

The PAO will notify the data aggregator, which will notify the applicant if their application is chosen for audit, ascertain that audit personnel have no conflict of interest with the audited organization and provide instructions on audit requirements. Obtaining final Recognition results takes longer than usual for applicants chosen for audit. For those applicants selected for audit, final Recognition determination will be made within 60 days of the date of data submission. Upon passing an audit, the applicant's recognition dates are assigned retroactively to the date the applicant's data was scored. Failure to pass an audit or failure to respond to an audit request and complete the audit within 30 days results in no further consideration for the program for six months to two years (depending on the audit score) from the date of submission of the application.

Duration of Recognition

The Chronic Care Recognition Programs have duration of two years from the date on which the recognition was awarded; regardless of the pathway the clinician achieved the recognition – electronic data submission, direct data manual submission.

For continuously assessed applicants who maintain their current level of recognition, new begin and end recognition dates will be assigned at the time of the most recent assessment. Recognition determinations are made on the basis of a specific patient population. Recognition status remains in effect for the duration of recognition as long as the clinician maintains their current practice and patient base. Clinicians are responsible for informing the data aggregator within 30 days who will inform the PAO if they move or change practices.

Changes in Recognition Levels to Ratings

Continuous data submission applicants are eligible for changes in recognition level. Clinicians who achieve at minimum of a Three (3) Star Hypertension Care Recognition will maintain their Hypertension Care Recognition for the duration of recognition outlined above. However, during this time it is possible for the recognition status to move between program ratings (3, 4, or 5 Stars) based on changes in clinical data from quarter to quarter. Changes to program ratings and recognition dates occur according to the following rules:

- Clinicians who achieve a higher rating of recognition for two consecutive assessment periods will have their recognition rating changed effective the date of the most recent assessment.
- Clinicians recognized at Four (4) Stars or Five (5) Stars can drop in levels of recognition based on lower scoring results for two consecutive assessment periods.
- Each time a clinician's recognition status changes ratings in either direction a new begin recognition date is assigned for the date of the most recent assessment and a new end recognition date is calculated.
- Clinicians who drop below Three (3) Stars for two consecutive quarterly assessments will be assigned or maintain Three (3) Star Hypertension Care Recognition status and maintain their current begin and end recognition dates.

Example 1

- A provider submitted for Q1 and was assessed at a 3 Star Rating
 - The providers 'Current Recognition' Level is a 3 Star Rating
- The provider was submitted in Q2 and was assessed at a 5 Star Rating
 - The providers 'Current Recognition' Level is a 3 Star Rating
- The provider was submitted in Q3 and was assessed at a 4 Star Rating
 - The providers 'Current Recognition' Level is now a 4 Star Rating

How this works:

If a provider's assessment level increases for 2 consecutive assessments, the new recognition level equals the lower of the 2 most recent assessment levels.

Assessment Date	Assessed Rating	Recognition Rating	Recognition Dates
Q1	3	3	01/21/2013 - 01/20/2015
Q2	5	3	04/21/2013 - 04/20/2015
Q3	4	4	07/21/2013 - 07/20/2015

Example 2

- A provider submitted in Q1 and was assessed at a 5 Star Rating
 - The providers 'Current Recognition' Level is a 5 Star Rating
- The provider submitted in Q2 and was assessed at a 4 Star Rating
 - The providers 'Current Recognition' Level is a 5 Star Rating
- The provider submitted in Q3 and was assessed at a 3 Star Rating
 - The providers 'Current Recognition' Level is now a 4 Rating

How this works:

If a provider's assessment level decreases for 2 consecutive assessments, the new recognition level equals the higher of the 2 most recent assessment levels.

Assessment Date	Assessed Rating	Recognition Rating	Recognition Dates
Q1	5	5	01/21/2013 - 1/20/2015
Q2	4	5	04/21/2013 - 04/20/2015
Q3	3	4	07/21/2013 - 07/20/2015

Example 3

- A provider submitted for Q1, Q2, and Q3, and was assessed at a 5 Star Rating all three submissions
 - The providers ‘Current Recognition’ Level remains unchanged and will be a 5 Star Rating

How it works:

If a provider’s assessment level remains the same for 2 consecutive assessments, the recognition level is unchanged.

Assessment Date	Assessed Rating	Recognition Rating	Recognition Dates
Q1	5	5	01/21/2013 - 1/20/2015
Q2	5	5	04/21/2013 - 04/20/2015
Q3	5	5	07/21/2013 - 07/20/2015

Reporting Results to BTE and Its Partners

As part of Altarum’s mission to identify and promote quality, the PAO report results to the following:

- To the data aggregator partner through which the recognition application was submitted. The data aggregator is required to share results reports with the clinician applicant to facilitate quality improvement.
- To BTE: Only Recognized statuses are reported to BTE for display on BTE’s web site www.bridgestoexcellence.org and transmission to BTE-licensed health plans for associated rewards payments. Once the final decision is made, the PAO will reveal the identity, program name and program level of the recognized clinicians only. No clinical data is shared with BTE at any point in the process.

Terms of Recognition

When communicating with patients, third-party payers, managed care organizations (MCOs) and others, clinicians or practices who receive BTE Hypertension Care Recognition may represent themselves as BTE-recognized and meeting NQF/AQA quality measure requirements; however, clinicians or practices may not characterize themselves as “NQF/AQA-Approved” or “NQF/AQA- Endorsed.” The use of this mischaracterization or other similarly inappropriate statements will be grounds for revocation of status.

Revoking Recognition

PAO may revoke a Recognition decision if any of the following occurs:

- The clinician or practice submits false data or does not collect data according to the procedures outlined in this manual, as determined by discussion with the clinician or practice or audit of application data and materials.
- The clinician or practice misrepresents the credentials of any of its clinicians.
- The clinician or practice misrepresents its Recognition status.
- The clinician or any of the practice’s clinicians experience a suspension or revocation of medical licensure.
- The clinician or practice has been placed in receivership or rehabilitation and is being liquidated.
- State, federal or other duly authorized regulatory or judicial action restricts or limits the clinician or practice’s operations.
- BTE identifies a significant threat to patient safety or care.

Data Use Terms

Data use terms are outlined in the data use agreement that the applicant signs with the selected data aggregator partner.

Patient Eligibility Criteria

An eligible essential hypertension patient is one who meets all three criteria:

1. Is between 18 and 75 years of age.²
2. Has had a documented diagnosis of essential hypertension (as defined in Table 3 below) for at least 12 months, from the last day of the reporting period. Eligible diagnosis categories exclude causes of secondary hypertension.
3. Has been under the care of the applicant for at least 12 months. This is defined by documentation of one or more face-to-face visits for hypertension care between the clinician and the patient: one within 12 months of the last day of the reporting period.

There are two accepted data sources that can be used to identify patients with hypertension:

Claims/Encounter data: Patient is denominator compliant if patient 18-75 years of age during the measurement period, has a documented diagnosis of Hypertension listed on the problem list, has had at least one (1) face-to-face encounter in an ambulatory setting and has been under the care of the applicant for at least 12 months. See Table 3 for further information on diagnoses to identify patients with Hypertension and Table 2 for further information on procedural codes to identify a face-to-face visit.

Medical Record data: Patient is denominator compliant if the patient 18-75 years of age, with a documented diagnosis of Hypertension listed on the problem list, has had at least one (1) face-to-face encounter in an ambulatory setting and has been under the care of the applicant for at least 12 months. See Table 3 for further information on diagnoses to identify patients with Hypertension and Table 2 for further information on procedural codes to identify a face-to-face visit.

Exclusions: Patients with a diagnosis of secondary hypertension OR other related conditions: Patients in hospice or palliative care are also excluded from the denominator. See Table 4 below for further information on codes to identify patients with exclusions.

² As of the last day of the reporting period. Patients known to be deceased should be excluded.

Relevant Procedural and Diagnosis Codes for Hypertension Care Measurement Set

Table 2: Face-to-Face Visits

Procedural Codes
CPT: 99201-99215, 99341-99350, G0402

Table 3: Codes to Identify a Patient with a Diagnosis of Essential Hypertension

Diagnosis Codes
ICD-9: 401, 401.0, 401.1, 401.9
ICD-10: I10

Table 4: Codes/Notations to Identify Patients with Exclusions

Procedural & Diagnosis Codes / Notations
<p>HYPERTENSIVE DISEASE</p> <p><u>Hypertensive Heart Disease</u></p> <p>ICD-9: 402, 402.0, 402.00, 402.01, 402.1, 402.10, 402.11, 402.9, 402.90, 402.91</p> <p>ICD-10: I11.9, I11.0</p> <p><u>Secondary Hypertension</u></p> <p>ICD-9: 405, 405.0, 405.01, 405.09, 405.1, 405.11, 405.19, 405.9, 405.91, 405.99</p> <p>ICD-10: I15.0, I15.1, I15.8, I15.9, N26.2</p> <p><u>Complications affecting other specified body systems, not elsewhere classified--Hypertension</u></p> <p>ICD-9: 997.91</p> <p>ICD-10: I97.3</p> <p>CORONARY ARTERY DISEASE</p> <p><u>Coronary Artery Disease</u></p> <p>ICD-9: 411.0, 411.1, 411.81, 411.89, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9</p> <p>ICD-10: I20.0, I20.1, I20.8, I20.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, I25.5, I25.6, I25.700, I25.701, I25.708, I25.709, I25.710, I25.711, I25.718, I25.719, I25.720, I25.721, I25.728, I25.729, I25.730, I25.731, I25.738, I25.739, I25.750, I25.751, I25.758, I25.759, I25.760, I25.761, I25.768, I25.769, I25.790, I25.791, I25.798, I25.799, I25.810, I25.811, I25.812, I25.82, I25.83, I25.89, I25.9, V45.81, V45.82, Z95.1, Z95.5, Z98.61</p> <p><u>Acute Myocardial Infarction</u></p> <p>ICD-9: 410.00, 410.01, 410.11, 410.20, 410.21, 410.30, 410.31, 410.40, 410.41, 410.50, 410.51, 410.60, 410.61, 410.70, 410.71, 410.80, 410.81, 410.90, 410.91</p> <p>ICD-10: I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I24.1, I22.0, I22.1, I22.2, I22.8, I22.9</p>

Stable Angina

ICD-9: 413, 413.0, 413.1, 413.9

ICD-10: I20.8-I20.9, I20.1

Percutaneous Coronary Intervention

CPT: 92980-92981, 92982, 92984, 92995, 92996, 92997, 92998, 33140

ICD-9: 36.06, 36.07, 36.09

ICD-10: O2C, O2C0, O2C1, O2C2, O2C3

CABG

CPT: 33510-33514, 33516-33519, 33521-33523, 33533-33536, 33542, 33545, 33572, 35600, 35601, 35606, 35612, 35616, 35621, 35623, 35626, 35631- 35634, 35636- 35638, 35642, 35645, 35646, 35647, 35650, 35651, 35654, 35656, 35661, 35663, 35665, 35666, 35671, 35501, 35506, 35508-35512, 35515, 35516, 35518, 35521- 35523, 35525, 35526, 35531, 35533, 35535- 35540, 35548, 35549, 35551, 35556, 35558, 35560, 35563, 35565, 35566, 35570, 35571

ICD-9: 36.10, 36.11, 36.12, 36.13, 36.14, 36.15, 36.16, 36.17, 36.19

ICD-10PCS: 0210093, 0210098, 0210099, 021009C, 021009F, 021009W, 02100A3, 02100A8, 02100A9, 02100AC, 02100AF, 02100AW, 02100J3, 02100J8, 02100J9, 02100JC, 02100JF, 02100JW, 02100K3, 02100K8, 02100K9, 02100KC, 02100KF, 02100KW, 02100Z3, 02100Z8, 02100Z9, 02100ZC, 02100ZF, 0210444, 0210493, 0210498, 0210499, 021049C, 021049F, 021049W, 02104A3, 02104A8, 02104A9, 02104AC, 02104AF, 02104AW, 02104D4, 02104J3, 02104J8, 02104J9, 02104JC, 02104JF, 02104JW, 02104K3, 02104K8, 02104K9, 02104KC, 02104KF, 02104KW, 02104Z3, 02104Z8, 02104Z9, 02104ZC, 02104ZF, 0211093, 0211098, 0211099, 021109C, 021109F, 021109W, 02110A3, 02110A8, 02110A9, 02110AC, 02110AF, 02110AW, 02110J3, 02110J8, 02110J9, 02110JC, 02110JF, 02110JW, 02110K3, 02110K8, 02110K9, 02110KC, 02110KF, 02110KW, 02110Z3, 02110Z8, 02110Z9, 02110ZC, 02110ZF, 0211444, 0211493, 0211498, 0211499, 021149C, 021149F, 021149W, 02114A3, 02114A8, 02114A9, 02114AC, 02114AF, 02114AW, 02114D4, 02114J3, 02114J8, 02114J9, 02114JC, 02114JF, 02114JW, 02114K3, 02114K8, 02114K9, 02114KC, 02114KF, 02114KW, 02114Z3, 02114Z8, 02114Z9, 02114ZC, 02114ZF, 0212093, 0212098, 0212099, 021209C, 021209F, 021209W, 02120A3, 02120A8, 02120A9, 02120AC, 02120AF, 02120AW, 02120J3, 02120J8, 02120J9, 02120JC, 02120JF, 02120JW, 02120K3, 02120K8, 02120K9, 02120KC, 02120KF, 02120KW, 02120Z3, 02120Z8, 02120Z9, 02120ZC, 02120ZF, 0212444, 0212493, 0212498, 0212499, 021249C, 021249F, 021249W, 02124A3, 02124A8, 02124A9, 02124AC, 02124AF, 02124AW, 02124D4, 02124J3, 02124J8, 02124J9, 02124JC, 02124JF, 02124JW, 02124K3, 02124K8, 02124K9, 02124KC, 02124KF, 02124KW, 02124Z3, 02124Z8, 02124Z9, 02124ZC, 02124ZF, 0213093, 0213098, 0213099, 021309C, 021309F, 021309W, 02130A3, 02130A8, 02130A9, 02130AC, 02130AF, 02130AW, 02130J3, 02130J8, 02130J9, 02130JC, 02130JF, 02130JW, 02130K3, 02130K8, 02130K9, 02130KC, 02130KF, 02130KW, 02130Z3, 02130Z8, 02130Z9, 02130ZC, 02130ZF, 0213444, 0213493, 0213498, 0213499, 021349C, 021349F, 021349W, 02134A3, 02134A8, 02134A9, 02134AC, 02134AF, 02134AW, 02134D4, 02134J3, 02134J8, 02134J9, 02134JC, 02134JF, 02134JW, 02134K3, 02134K8, 02134K9, 02134KC, 02134KF, 02134KW, 02134Z3, 02134Z8, 02134Z9, 02134ZC, 02134ZF

PERIPHERAL ARTERIAL DISEASE

Lower Extremity Arterial Disease/Peripheral Arterial Disease

ICD-9: 440.20-440.24, 440.29, 447.0-447.6, 447.8, 447.9, 444.2, 444.81, 444.89, 444.9

ICD-10: I70.201-I70.209, I70.211-I70.213, I70.218, I70.219, I70.221-I70.223, I70.228, I70.229, I70.231-I70.235, I70.238, I70.239, I70.241-I70.245, I70.248, I70.249, I70.25, I70.261-I70.263, I70.268, I70.269, I70.291- I70.293, I70.298, I70.299, I74.3-I74.5, I74.8, I74.9, I77.9

CEREBROVASCULAR DISEASE

Ischemia

ICD-9: 411.0, 411.1, 411.81, 411.89, 413.0, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.4, 414.8, 414.9, 429.2, 433.00, 433.01, 433.10, 433.11, 433.20, 433.21, 433.30, 433.31, 433.80, 433.81, 433.90, 433.91, 434.00, 434.01, 434.10, 434.11, 434.80, 434.91, 437.0, 440.1, 440.20, 440.21, 440.22, 440.30, 440.31, 440.32, 440.4, 440.8, 440.9, 444.1, 444.21, 444.22, 444.81, 444.89, 444.9, 445.01, 445.02, 445.81, 445.89

ICD-10: I20.0, I20.8, I20.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, I25.5, I25.6, I25.700, I25.701, I25.708, I25.709, I25.710, I25.711, I25.718, I25.719, I25.720, I25.721, I25.728, I25.729, I25.730, I25.731, I25.738, I25.739, I25.750, I25.751, I25.758, I25.759, I25.760, I25.761, I25.768, I25.769, I25.790, I25.791, I25.798, I25.799, I25.810, I25.811, I25.812, I25.82, I25.83, I25.84, I25.89, I25.9, I63.00, I63.011, I63.012, I63.019, I63.02, I63.031, I63.032, I63.039, I63.09, I63.10, I63.111, I63.112, I63.119, I63.12, I63.131, I63.132, I63.139, I63.19, I63.20, I63.211, I63.212, I63.213, I63.219, I63.22, I63.231, I63.232, I63.233, I63.239, I63.29, I63.30, I63.311, I63.312, I63.319, I63.321, I63.322, I63.329, I63.331, I63.332, I63.339, I63.341, I63.342, I63.349, I63.39, I63.40, I63.411, I63.412, I63.419, I63.421, I63.422, I63.429, I63.431, I63.432, I63.439, I63.441, I63.442, I63.449, I63.49, I63.50, I63.511, I63.512, I63.513, I63.519, I63.521, I63.522, I63.523, I63.529, I63.531, I63.532, I63.533, I63.539, I63.541, I63.542, I63.543, I63.549, I63.59, I63.6, I63.8, I63.9, I65.01, I65.02, I65.03, I65.09, I65.1, I65.21, I65.22, I65.23, I65.29, I65.8, I65.9, I66.01, I66.02, I66.03, I66.09, I66.11, I66.12, I66.13, I66.19, I66.21, I66.22, I66.23, I66.29, I66.3, I66.8, I66.9, I67.2, I70.0, I70.1, I70.201, I70.202, I70.203, I70.208, I70.209, I70.211, I70.212, I70.213, I70.218, I70.219, I70.221, I70.222, I70.223, I70.228, I70.229, I70.231, I70.232, I70.233, I70.234, I70.235, I70.238, I70.239, I70.241, I70.242, I70.243, I70.244, I70.245, I70.248, I70.249, I70.25, I70.261, I70.262, I70.263, I70.268, I70.269, I70.291, I70.292, I70.293, I70.298, I70.299, I70.301, I70.302, I70.303, I70.308, I70.309, I70.311, I70.312, I70.313, I70.318, I70.319, I70.321, I70.322, I70.323, I70.328, I70.329, I70.331, I70.332, I70.333, I70.334, I70.335, I70.338, I70.339, I70.341, I70.342, I70.343, I70.344, I70.345, I70.348, I70.349, I70.35, I70.361, I70.362, I70.363, I70.368, I70.369, I70.391, I70.392, I70.393, I70.398, I70.399, I70.401, I70.402, I70.403, I70.408, I70.409, I70.411, I70.412, I70.413, I70.418, I70.419, I70.421, I70.422, I70.423, I70.428, I70.429, I70.431, I70.432, I70.433, I70.434, I70.435, I70.438, I70.439, I70.441, I70.442, I70.443, I70.444, I70.445, I70.448, I70.449, I70.45, I70.461, I70.462, I70.463, I70.468, I70.469, I70.491, I70.492, I70.493, I70.498, I70.499, I70.501, I70.502, I70.503, I70.508, I70.509, I70.511, I70.512, I70.513, I70.518, I70.519, I70.521, I70.522, I70.523, I70.528, I70.529, I70.531, I70.532, I70.533, I70.534, I70.535, I70.538, I70.539, I70.541, I70.542, I70.543, I70.544, I70.545, I70.548, I70.549, I70.55, I70.561, I70.562, I70.563, I70.568, I70.569, I70.591, I70.592, I70.593, I70.598, I70.599, I70.601, I70.602, I70.603, I70.608, I70.609, I70.611, I70.612, I70.613, I70.618, I70.619, I70.621, I70.622, I70.623, I70.628, I70.629, I70.631, I70.632, I70.633, I70.634, I70.635, I70.638, I70.639, I70.641, I70.642, I70.643, I70.644, I70.645, I70.648, I70.649, I70.65, I70.661, I70.662, I70.663, I70.668, I70.669, I70.691, I70.692, I70.693, I70.698, I70.699, I70.701, I70.702, I70.703, I70.708, I70.709, I70.711, I70.712, I70.713, I70.718, I70.719, I70.721, I70.722, I70.723, I70.728, I70.729, I70.731, I70.732, I70.733, I70.734, I70.735, I70.738, I70.739, I70.741, I70.742, I70.743, I70.744, I70.745, I70.748, I70.749, I70.75, I70.761, I70.762, I70.763, I70.768, I70.769, I70.791, I70.792, I70.793, I70.798, I70.799, I70.8, I70.90, I70.91, I70.92, I74.01, I74.09, I74.10, I74.11, I74.19, I74.2, I74.3, I74.4, I74.5, I74.8, I74.9, I75.011, I75.012, I75.013, I75.019, I75.021, I75.022, I75.023, I75.029, I75.81, I75.89, T82.855A, T82.855D, T82.855S, T82.856A, T82.856D, T82.856S

Stroke

ICD-9: 433.01, 433.11, 433.21, 433.81, 433.91, 434.01, 434.11, 434.91

ICD-10: I63.00, I63.011, I63.012, I63.013, I63.019, I63.02, I63.031, I63.032, I63.033, I63.039, I63.09, I63.10, I63.111, I63.112, I63.113, I63.119, I63.12, I63.131, I63.132, I63.133, I63.139, I63.19, I63.20, I63.211, I63.212, I63.213, I63.219, I63.22, I63.231, I63.232, I63.233, I63.239, I63.29, I63.30, I63.311, I63.312, I63.313, I63.319, I63.321, I63.322, I63.323, I63.329, I63.331, I63.332, I63.333, I63.339, I63.341, I63.342, I63.343, I63.349, I63.39, I63.40, I63.411, I63.412, I63.413, I63.419, I63.421, I63.422, I63.423, I63.429, I63.431, I63.432, I63.433, I63.439, I63.441, I63.442, I63.443, I63.449, I63.49, I63.50, I63.511, I63.512, I63.513, I63.519, I63.521, I63.522, I63.523, I63.529, I63.531, I63.532, I63.533, I63.539, I63.541, I63.542, I63.543, I63.549, I63.59, I63.6, I63.8, I63.9

Atheroembolism

ICD-9: 445.01, 445.02, 445.81, 445.89

ICD-10: I75.011, I75.012, I75.013, I75.019, I75.021, I75.022, I75.023, I75.029, I75.81, I75.89

Hospice Care

CPT: 99377, 99378

Value Set Authority-Value Set Name-Hospice Care CPT-OID 2.16.840.1.113883.3.3157.1004.19

Palliative Care

ICD-9: V66.7

ICD-10: Z51.5

Value Set Authority-Value Set Name- Palliative Care-OID 2.16.840.1.113762.1.4.1125.3

Table 5: Codes to Identify a Patient with a Diagnosis of Chronic Kidney Disease

Diagnosis Codes
ICD-9: 585.1, 585.2, 585.3, 585.4, 585.5, 585.9
ICD-10: N18.1, N18.2, N18.3, N18.4, N18.5, N18.9

Table 6: Codes to Identify a Patient with a Diagnosis of Diabetes

Diagnosis Codes
ICD-9: 250.00, 250.01, 250.02, 250.03, 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.21, 250.23, 250.30, 250.31, 250.32, 250.33, 250.40, 250.41, 250.42, 250.43, 250.50, 250.51, 250.52, 250.53, 250.60, 250.61, 250.62, 250.63, 250.70, 250.71, 250.72, 250.73, 250.80, 250.81, 250.82, 250.83, 250.90, 250.91, 250.92, 250.93, 357.2, 362.01, 362.02, 362.03, 362.04, 362.05, 362.06, 362.07.
ICD-10: E10.10, E10.11, E10.21, E10.22, E10.29, E10.311, E10.319, E10.321, E10.329, E10.331, E10.339, E10.341, E10.349, E10.351, E10.359, E10.36, E10.39, E10.40, E10.41, E10.42, E10.43, E10.44, E10.49, E10.51, E10.52, E10.59, E10.610, E10.618, E10.620, E10.621, E10.622, E10.628, E10.630, E10.638, E10.641, E10.649, E10.65, E10.69, E10.8, E10.9, E11.00, E11.01, E11.21, E11.22, E11.29, E11.311, E11.319, E11.321, E11.329, E11.331, E11.339, E11.341, E11.349, E11.351, E11.359, E11.36, E11.39, E11.40, E11.41, E11.42, E11.43, E11.44, E11.49, E11.51, E11.52, E11.59, E11.610, E11.618, E11.620, E11.621, E11.622, E11.628, E11.630, E11.638, E11.641, E11.649, E11.65, E11.69, E11.8, E11.9, E13.00, E13.01, E13.10, E13.11, E13.21, E13.22, E13.29, E13.311, E13.319, E13.321, E13.329, E13.331, E13.339, E13.341, E13.349, E13.351, E13.359, E13.36, E13.39, E13.40, E13.41, E13.42, E13.43, E13.44, E13.49, E13.51, E13.52, E13.59, E13.610, E13.618, E13.620, E13.621, E13.622, E13.628, E13.630, E13.638, E13.641, E13.649, E13.65, E13.69, E13.8, E13.9

Relevant Medication Lists for Hypertension Care Measurement Set

Table 7: Beta-Blocker

Drug Names	Generic Names
Acebutolol	Generic
Atenolol	Generic
Betapace	Sotalol
Betapace AF	Sotalol AF
Betaxolol	Generic
Bisoprolol	Generic
Brevibloc	Esmolol
Bystolic	Nebivolol
Byvalson	Nebivolol/valsartan
Carvedilol	Generic
Coreg	Carvedilol
Coreg CR	Carvedilol
Corgard	Nadolol
Esmolol	Generic
Hemangeol	Propranolol Hydrochloride
Inderal	Propranolol Hydrochloride
Inderal LA	Propranolol Hydrochloride
InnoPran XL	Propranolol Hydrochloride
Kerlone	Betaxolol
Labetalol	Generic
Levatol	Penbutolol
Lopressor	Metoprolol Tartrate
Metoprolol succinate	Generic
Metoprolol tartrate	Generic
Nadolol	Generic
Pindolol	Generic
Propranolol hydrochloride	Generic

Sectral	Acebutolol
Sorine	Sotalol
Sotalol	Generic
Sotalol AF	Generic
Sotylize	Sotalol
Tenormin	Generic
Timolol	Generic
Toprol-XL	Metoprolol Succinate
Trandate	Labetalol
Zebeta	Bisoprolol

Table 8: Angiotensin-Converting Enzyme (ACE) Inhibitors

Drug Names	Generic Names
Accupril	Quinapril
Aceon	Perindopril Erbumine
Altace	Ramipril
Amlodipine/Benazepril	Generic
Benazepril	Generic
Capoten	Captopril
Captopril	Generic
Enalapril	Generic
Enalaprilat	Generic
Epaned	Enalapril
Gosinopril	Generic
Lisinopril	Generic
Lotensin	Benazepril
Lotrel	Amlodipine/Benazepril
Mavik	Trandolapril
Moexipril	Generic
Monopril	Fosinopril
Perindopril Erbumine	Generic

Prestalia	Perindopril Arginine/Amlodipine
Prinivil	Lisinopril
Qbrelis	Lisinopril
Quinapril	Generic
Ramipril	Generic
Tarka	Trandolapril/Verapamil
Trandolapril	Generic
Trandolapril/Verapamil	Generic
Univasc	Moexipril
Vasotec	Enalapril
Vasotec IV	Enalaprilat
Zestril	Lisinopril

Table 9: Angiotensin Receptor Blockers (ARBs)

Drug Names	Generic Names
Amlodipine/Olmesartan Medoxomi	Generic
Amlodipine/Valsartan	Generic
Atacand	Candesartan Cilexetil
Avapro	Irbesartan
Azor	Amlodipine/Olmesartan Medoxomil
Benicar	Olmesartan Medoxomil
Byvalson	Nebivolol/Valsartan
Candesartan Cilexetil	Generic
Cozaar	Losartan
Diovan	Valsartan
Edarbi	Azilsartan Medoxomil
Entresto	Sacubitril/Valsartan
Eprosartan	Generic
Exforge	Amlodipine/Valsartan
Irbesartan	Generic
Losartan	Generic
Micardis	Telmisartan
Olmesartan Medoxomil	Generic

Telmisartan	Generic
Telmisartan/Amlodipine	Generic
Teveten	Eprosartan
Twynsta	Telmisartan/Amlodipine
Valsartan	Generic

Table 10: Thiazide

Drug Names	Generic Names
Aldactazide	Spirolactone/Hydrochlorothiazide
Amiloride/Hydrochlorothiazide	Generic
Amturnide	Aliskiren/Amlodipine/Hydrochlorothiazide
Chlorothiazide	Generic
Chlorthalidone	Generic
Clorpres	Clonidine/Chlorthalidone
Diuril	Chlorothiazide
Dyazide	Triamterene/Hydrochlorothiazide
Esidrix	Hydrochlorothiazide
Hydra-Zide	Hydralazine/Hydrochlorothiazide
Hydrochlorothiazide	Generic
Indapamide	Generic
Lozol	Indapamide
Maxzide	Triamterene/Hydrochlorothiazide
Methyclothiazide	Generic
Metolazone	Generic
Microzide	Hydrochlorothiazide
Spirolactone/Hydrochlorothiazide	Generic
Tekturna HCT	Aliskiren/Hydrochlorothiazide
Triamterene/Hydrochlorothiazide	Generic
Zaroxolyn	Metolazone

Table 11: Beta Blocker/Thiazide Combos

Drug Names	Generic Names
Atenolol/Chlorthalidone	Generic
Bisoprolol/Hydrochlorothiazide	Generic
Corzide	Nadolol/Bendroflumethiazide
Dutoprol	Metoprolol succinate/Hydrochlorothiazide
Lopressor HCT	Metoprolol Tartrate/Hydrochlorothiazide
Metoprolol Tartrate/Hydrochlorothiazide	Generic
Nadolol/Bendroflumethiazide	Generic
Propranolol Hydrochloride/Hydrochlorothiazide	Generic
Tenoretic	Atenolol/Chlorthalidone
Ziac	Bisoprolol/Hydrochlorothiazide

Table 12: Angiotensin-Converting Enzyme (ACE) Inhibitor/Thiazide Combos

Drug Names	Generic Names
Accuretic	Quinapril/Hydrochlorothiazide
Benazepril/Hydrochlorothiazide	Generic
Capozide	Captopril/Hydrochlorothiazide
Captopril/Hydrochlorothiazide	Generic
Enalapril/Hydrochlorothiazide	Generic
Fosinopril/Hydrochlorothiazide	Generic
Lisinopril/Hydrochlorothiazide	Generic
Lotensin HCT	Benazepril/Hydrochlorothiazide
Moexipril/Hydrochlorothiazide	Generic
Monopril-HCT	Fosinopril/Hydrochlorothiazide
Prinzide	Lisinopril/Hydrochlorothiazide
Quinapril/Hydrochlorothiazide	Generic
Uniretic	Moexipril/Hydrochlorothiazide
Vaseretic	Enalapril/Hydrochlorothiazide
Zestoretic	Lisinopril/Hydrochlorothiazide

Table 13: Angiotensin Receptor Blocker (ARB)/Thiazide Combos

Drug Names	Generic Names
Amlodipine/Valsartan/Hydrochlorothiazide	Generic
Atacand HCT	Candesartan Cilexetil/Hydrochlorothiazide
Avalide	Irbesartan/Hydrochlorothiazide
Benicar HCT	Olmesartan Medoxomil/Hydrochlorothiazide
Candesartan Cilexetil/Hydrochlorothiazide	Generic
Diovan HCT	Valsartan/Hydrochlorothiazide
Hyzaar	Losartan/Hydrochlorothiazide
Edarbyclor	Azilsartan Medoxomil/Chlorthalidone
Exforge HCT	Amlodipine/Valsartan/Hydrochlorothiazide
Irbesartan/Hydrochlorothiazide	Generic
Losartan/Hydrochlorothiazide	Generic
Micardis HCT	Telmisartan/Hydrochlorothiazide
Telmisartan/Hydrochlorothiazide	Generic
Teveten HCT	Eprosartan/Hydrochlorothiazide
Tribenzor	Olmesartan Medoxomil/Amlodipine/Hydrochlorothiazide
Valsartan/Hydrochlorothiazide	Generic

Table 14: Loop Diuretics

Drug Names	Generic Names
Bumetanide	Generic
Bumex	Bumetanide
Demadex	Torsemide
Edecrin	Ethacrynic Acid
Ethacrynic Acid	Generic
Furosemide	Generic
Lasix	Furosemide
Torsemide	Generic

Table 15: Potassium-Sparing Diuretics

Drug Names	Generic Names
Aldactazide	Spironolactone/Hydrochlorothiazide
Aldactone	Spironolactone
Amiloride	Generic
Amiloride/Hydrochlorothiazide	Generic
Dyazide	Triamterene/Hydrochlorothiazide
Dyrenium	Triamterene
Maxzide	Triamterene/Hydrochlorothiazide
Midamor	Amiloride
Spironolactone	Generic
Spironolactone/Hydrochlorothiazide	Generic
Triamterene/Hydrochlorothiazide	Generic

Table 16: Calcium Channel Blockers (CCBs), Dihydropyridine

Drug Names	Generic Names
Adalat CC	Nifedipine
Afeditab CR	Nifedipine
Amlodipine	Generic
Amlodipine/Atorvastatin	Generic
Amlodipine/Benazepril	Generic
Amlodipine/Valsartan	Generic
Amlodipine/Valsartan/Hydrochlorothiazide	Generic
Amturnide	Aliskiren/Amlodipine/Hydrochlorothiazide
Azor	Amlodipine/Olmesartan Medoxomil
Caduet	Amlodipine/Atorvastatin
Cardene	Nicardipine
Cardene SR	Nicardipine
Cleviprex	Clevidipine
Dynarcirc CR	Isradipine

Exforge	Amlodipine/Valsartan
Exforge HCT	Amlodipine/Valsartan/Hydrochlorothiazide
Felodipine	Generic
Isradipine	Generic
Lotrel	Amlodipine/Benazepril
Nicardipine	Generic
Nifedical CC	Nifedipine
Nifedical XL	Nifedipine
Nifedipine	Generic
Nimodipine	Generic
Nimotop	Nimodipine
Nisoldipine	Generic
Norvasc	Amlodipine
Nymalize	Nimodipine
Plendil	Felodipine
Prestalia	Perindopril Arginine/Amlodipine
Procardia	Nifedipine
Procardia XL	Nifedipine
Sular	Nisoldipine
Tekamlo	Aliskiren/Amlodipine
Telmisartan/amoldipine	Generic
Tribenzor	Olmesartan Medoxomil/ Amlodipine/Hydrochlorothiazide
Twynsta	Telmisartan/Amlodipine

Table 17: Calcium Channel Blockers (CCBs), Non-Dihydropyridine

Drug Names	Generic Names
Calan	Verapamil
Calan SR	Verapamil
Cardizem	Diltiazem

Cardizem CD	Diltiazem
Cardizem LA	Diltiazem
Cartia XT	Diltiazem
Covera-HS	Verapamil
Dilacor XR	Diltiazem
Dilt-CD	Diltiazem
Diltia XT	Diltiazem
Diltiazem	Generic
Isopitin SR	Verapamil
Tarka	Trandolapril/Verapamil
Taztia XT	Diltiazem
Tiazac	Diltiazem
Trandolapril/Verapamil	Generic
Verapamil	Generic
Verelan	Verapamil
Verelan PM	Verapamil

Table 18: Nitrates

Drug Names	Generic Names
Apresoline	Hydralazine
BiDil	Isosorbide Dinitrate/Hydralazine
Corlopan	Fenoldopam
Dilatrate-SR	Isosorbide Dinitrate
Gonitro	Nitroglycerin
Hydra-Zide	Hydralazine/Hydrochlorothiazide
Hydralazine	Generic
Imdur	Isosorbide Mononitrate
Ismo	Isosorbide Mononitrate
Isordil	Isosorbide Dinitrate
Isordil Titrados	Isosorbide Dinitrate

Isosorbide Dinitrate	Generic
Isosorbide Mononitrate	Generic
Minoxidil	Generic
Monoket	Isosorbide Mononitrate
Nipride	Nitroprusside
Nitro-Bid	Nitroglycerin Topical
Nitro-Dur	Nitroglycerin Transdermal
Nitroglycerin	Generic
Nitroglycerin Transdermal	Generic
Nitrolingual	Nitroglycerin
NitroMist	Nitroglycerin
Nitropress	Nitroprusside
Nitrostat	Nitroglycerin

Table 19: Alpha Agents

Drug Names	Generic Names
Cardura	Doxazosin
Dibenzylamine	Phenoxybenzamine
Doxazosin	Generic
Hytrin	Terazosin
Minipress	Prazosin
Phenoxybenzamine	Generic
Phentolamine	Generic
Prazosin	Generic
Terazosin	Generic
Guanfacine	Generic

Table 20: Tobacco Cessation Medications

Buproban Oral	Habitrol (TD)	Nicotine TD	NTS Step 1 TD
Bupropion SR	INTS Step 3 TD	Nicotine Transdermal TD	NTS Step 2 TD
Brupopion XL	Medic Nicotine TD	Nicotrol (PDR)	NTS Step 3 TD
Chantix (varenicline)	NicoDerm CQ	Nicotrol Inhaler (PDR)	Prostep TD
CVS NTS Step 1 TD	NicoDerm CQ TD	Nicotrol NS (PDR)	Wellbutrin

CVS NTS Step 2 TD	NicoDerm TD	Nicotrol NS Nasl	Zyban (PDR)
CVS NTS Step 3 TD	Nicotine Nasal	Nicotrol TD	Zyban Oral
Habitrol (PDR)	Nicotine Patches (PDR)	Nicotrol TD	

APPENDICES

Appendix A: Audit Methodology

The PAO is responsible for conducting three levels of audit pertaining to applicant submissions for BTE Hypertension Care Recognition:

- Level 1: Data Aggregator (DA) Data Extraction code review
- Level 2: Data Validation (Load Summary) See table below
- Level 3: Clinician Chart Audit

Detailed audit policies are included in the BTE Clinician Assessment Policy and Procedures Manual.

The following data validation checks are used in creating the load summary provided to the data aggregator after each data file submission to identify any missing or invalid data values:

Clinician Identifier Data

Data Field	Data Field Specifications and Acceptable/Valid Data Range(s)
Clinician_ResplD	(Required field) Alphanumeric value up to 26 characters in length
Clinician_NPI	(Required field) Numeric value 10 characters in length
Clinician_DEA	Alphanumeric value 9 characters in length First letter must be "A", "B", "F" or "M".
Clinician_MedicalLicense	Alphanumeric value up to 10 characters in length
Clinician_LastName	(Required field) Alpha value up to 50 characters in length
Clinician_FirstName	(Required field) Alpha value up to 50 characters in length
Clinician_MiddleName	Alpha value up to 30 characters in length
Clinician_Degree	(Required field) Numeric value 01 = M.D. 02 = D.O. 03 = N.P. 04 = P.A.
Clinician_PracticeAddress1	(Required field) Alphanumeric value up to 100 characters in length
Clinician_PracticeAddress2	Alphanumeric value up to 100 characters in length
Clinician_PracticeCity	(Required field) Alpha value up to 100 characters in length

Clinician_PracticeState	(Required field) Alpha value 2 characters in length
Clinician_PracticeZipCode	Numeric value 5 (#####), 9 (#####) or 10 characters (#####-####) in length
Clinician_emailaddress	Example: smith@email.com
Clinician_PracticePhone	Alphanumeric value up to 30 characters in length
Clinician_DateofBirth	Numeric value: MM/DD/YYYY
Clinician_Gender	F = Female M = Male U = Unknown
Clinician_Specialty	01 = Allergy/Immunology 02 = Cardiology 03 = Critical Care Services 04 = Dermatology 05 = Endocrinology 06 = Gastroenterology 07 = Gen/Fam Practice 08 = Geriatric Medicine 09 = Hematology 10 = Infectious Disease 11 = Internal Medicine 12 = Nephrology 13 = Neurology 14 = Neurosurgery 15 = Obstetrics/Gynecology 16 = Occ. Medicine 17 = Oncology 18 = Ophthalmology 19 = Orthopedics 20 = Otolaryngology 21 = Pediatrics 22 = Phys/Rehab Medicine 23 = Psychiatry 24 = Psychopharmacology 25 = Pulmonary Medicine 26 = Rheumatology 27 = Surgery 28 = Urology 29 = Other – not listed
Practice ID	(Required field) Alphanumeric value up to 26 characters in length

PracticeName	(Required field) Alpha value up to 100 characters in length
Individual_Group	(Required Field) Alpha value I - Individual Scoring or G - Group Scoring
Group_GroupID	If yes, Provide the Group ID that the Individual Provider wishes to be associated with. Numeric value 10 characters in length
Data Submission through CCHIT /Meaningful Use Certified System	Yes/No
Full Patient Panel	Yes/No

Clinical Measures Data

Data field	Data field specifications	Data Values
responsibleProviderID	Internal provider ID that matches with the ID in the physician file	Any unique combination of characters and numbers
NPI	Responsible Provider NPI	Alphanumeric value 10 characters in length
groupID	The unique identifier that will identify the providers within a group applying for recognition together.	Alphanumeric value up to 50 characters in length
individualGroup	G if the provider is applying as part of a group for recognition. I if the provider is applying individually.	I or G - blank will default to I
chartID	Unique patient or chart ID	Alphanumeric value up to 50 characters in length
lastVisitDate	The date of the last face-to face encounter/visit for the patient	MM/DD/YYYY - cannot be after the end of the reporting period
patientDOB	The date of birth, or year of birth, of the patient	MM/DD/YYYY - or YYYY - must be 18-75 years' old
patientGender	Patient's Gender	Female, Male

medicarePartB	Is the patient a Medicare Part B Fee-For-Service (FFS) beneficiary (includes Railroad Retirement Board, Medicare Secondary Payer, and Critical Access Hospitals method II; does not include Medicare Advantage beneficiaries)?	YES, NO blank will generate a WARNING when uploading
hypertensionDiagnosis	Does this patient have a diagnosis of Hypertension?	YES, NO blank will generate a WARNING when uploading
bloodPressureDate1	Date of most recent Blood Pressure reading	MM/DD/YYYY
systolic1	Most recent Systolic blood pressure value	Numeric value between 60 and 300
diastolic1	Most recent Diastolic blood pressure value	Numeric value between 40 and 150
bloodPressureDate2	Date of prior Blood Pressure reading	MM/DD/YYYY
systolic2	Prior Systolic blood pressure value	Numeric value between 60 and 300
diastolic2	Prior Diastolic blood pressure value	Numeric value between 40 and 150
chronicKidneyDiseaseDiagnosis	Does this patient have a diagnosis of Chronic Kidney Disease?	YES, NO
diabetesDiagnosis	Does this patient have a diagnosis of Diabetes?	YES, NO
calciumChannelBlocker	Has the patient been prescribed a Calcium Channel Blocker?	YES, NO, documented allergy or contraindication
Thiazide	Has the patient been prescribed Thiazide?	YES, NO, documented allergy or contraindication
nephropathyDiagnosis	Does this patient have a diagnosis of Nephropathy?	YES, NO, documented allergy or contraindication
nephropathyScreening	Was the patient screened for Nephropathy?	YES, NO
nephropathyScreeningDate	Date of most recent Nephropathy Screening?	MM/DD/YYYY - cannot be after the end of the reporting period
creatinineDate	Date of most recent creatinine test?	MM/DD/YYYY
tobaccoStatus	Is the patient a tobacco user?	Tobacco Free, Current Tobacco User
tobaccoStatusAssessmentDate	Date the patient's tobacco use status was most recently assessed	MM/DD/YYYY - cannot be after the end of the reporting period

tobaccoCessationAdviceOrTreatmentDate	Date the patient was most recently given tobacco cessation counseling or treatment	MM/DD/YYYY - cannot be after the end of the reporting period
bmiValue	Most recent Body Mass Index	Numeric Value
bmiValueDate	Date of most recent Body Mass Index (BMI) Calculation	MM/DD/YYYY
DASHDietCounseling	Was the patient's nutritional counseling to include the DASH diet conducted?	YES, NO
DASHDietDate	Date the patient was most recently given the DASH diet counseling	MM/DD/YYYY - cannot be after the end of the reporting period MM/DD/YYYY
DASHSodiumCounseling	Was the patient's nutritional counseling to include a DASH low-salt diet conducted?	YES, NO
DASHSodiumDate	Date the patient was most recently given the DASH low-salt counseling	MM/DD/YYYY - cannot be after the end of the reporting period
activityStatus	What is the most recent activity status of the patient?	Active, Not Active
activityStatusDate	Date the patient's activity status was assessed	MM/DD/YYYY - cannot be after the end of the reporting period
activityCounseling	Did the patient receive physical activity counseling?	YES, NO

Measures Specifications

Blood Pressure (BP) Control in Patients age ≥ 60

DENOMINATOR REQUIREMENTS

Patients are included in the denominator when:

- Patient age = 60-75
- HypertensionDiagnosis = YES
- lastVisitDate = date is present and within reporting period (12 months)

NUMERATOR REQUIREMENTS

Patients in the denominator are numerator compliant when:

Systolic2 = value is present AND value is <150

AND

Diastolic2 = value is present AND value is <90

AND

BloodPressureDate2 = date is present and within reporting period (12 months)

SCORING

Score=(numerator/denominator) x Total Possible Points

Blood Pressure Control in Patients < 60

DENOMINATOR REQUIREMENTS

Patients are included in the denominator when:

- Patient age = 18 – 59
- HypertensionDiagnosis = YES
- lastVisitDate = date is present and within reporting period (12 months)

NUMERATOR REQUIREMENTS

Patients in the denominator are numerator compliant when:

Systolic2 = value is present AND value is <140

AND

Diastolic2 = value is present AND value is <90

AND

Blood Pressure Date2 = date is present and within reporting period (12 months)

SCORING

Score=(numerator/denominator) x Total Possible Points

Documentation of Blood Pressure Measurement Twice Annually

DENOMINATOR REQUIREMENTS:

Patients are included in the denominator when:

- PatientAge = 18 – 75
- HypertensionDiagnosis = YES
- lastVisitDate = date is present and within reporting period (12 months)

NUMERATOR REQUIREMENTS:

Patients in the denominator are numerator compliant when:

Systolic1 = value is present

AND

Diastolic1 = value is present

AND

BloodPressureDate1 = date is present and within reporting period (12 months)

AND

Systolic2 = value is present

AND

Diastolic2 = value is present

AND

BloodPressureDate2 = date is present and at least 90 days apart from BP Date1 and within reporting period (12 months prior to the last day of the reporting period)

SCORING

Score=(numerator/denominator) x Total Possible Points

Blood Pressure Control in Patients with Chronic Kidney Disease

DENOMINATOR REQUIREMENTS:

Patients are included in the denominator when:

- PatientAge = 18 – 75
- HypertensionDiagnosis = YES
- ChronicKidneyDiseaseDiagnosis = YES
- lastVisitDate = date is present and within reporting period (12 months)

NUMERATOR REQUIREMENTS:

Patients in the denominator are numerator compliant when:

Systolic2 = value is present AND value is <140

AND

Diastolic2 = value is present AND value is <90

AND

Blood Pressure Date2 = date is present and within reporting period (12 months)

SCORING

Score=(numerator/denominator) x Total Possible Points

ACEI/ARB Treatment for Hypertensive Patients with CKD

DENOMINATOR REQUIREMENTS:

Patients are included in the denominator when:

- PatientAge = 18 – 75
- HypertensionDiagnosis = YES
- ChronicKidneyDiseaseDiagnosis = YES
- lastVisitDate = date is present and within reporting period (12 months)

NUMERATOR REQUIREMENTS:

Patients in the denominator are numerator compliant when:

AceiArbTherapy = YES

OR

AceiArbTherapy = documented allergy or contraindication

SCORING

Score=(numerator/denominator) x Total Possible Points

Blood Pressure Control in Patients with Diabetes

DENOMINATOR REQUIREMENTS:

Patients are included in the denominator when:

- PatientAge = 18 – 75
- HypertensionDiagnosis = YES
- DiabetesDiagnosis = YES
- lastVisitDate = date is present and within reporting period (12 months)

NUMERATOR REQUIREMENTS:

Patients in the denominator are numerator compliant when:

Systolic2 = value is present AND value is <140

AND

Diastolic2 = value is present AND value is <90

AND

Blood Pressure Date2 = date is present and within reporting period (12 months)

SCORING

Score=(numerator/denominator) x Total Possible Points

Blood Pressure Treatment in Patients Requiring Pharmacotherapy

DENOMINATOR REQUIREMENTS:

Patients are included in the denominator when:

- PatientAge = 18 – 75
- HypertensionDiagnosis = YES
- lastVisitDate = date is present and within reporting period (12 months)

NUMERATOR REQUIREMENTS:

Patients in the denominator are numerator compliant when:

AceiArbTherapy = YES

OR

ThiazidePrescribed = YES

OR

CalciumChannelBlockerPrescribed = YES

SCORING

Score=(numerator/denominator) x Total Possible Points

Nephropathy Assessment Urine

DENOMINATOR REQUIREMENTS:

Patients are included in the denominator when:

- PatientAge = 18 – 75
- HypertensionDiagnosis = YES
- lastVisitDate = date is present and within reporting period (12 months)

NUMERATOR REQUIREMENTS:

Patients in the denominator are numerator compliant when:

NephropathyDiagnosis = YES

AND

NephropathyScreeningDate = date is present and within reporting period (12 months)

SCORING

Score=(numerator/denominator) x Total Possible Points

Renal Function Testing in Hypertensive Patients

DENOMINATOR REQUIREMENTS:

Patients are included in the denominator when:

- PatientAge = 18 – 75
- HypertensionDiagnosis = YES
- lastVisitDate = date is present and within reporting period (12 months)

NUMERATOR REQUIREMENTS:

Patients in the denominator are numerator compliant when:

Creatinine = YES

AND

SerumCreatinineDate = date is present and within reporting period (12 months)

SCORING

Score=(numerator/denominator) x Total Possible Points

Documentation of Tobacco Status

DENOMINATOR REQUIREMENTS:

Patients are included in the denominator when:

- PatientAge = 18 – 75
- HypertensionDiagnosis = YES
- TobaccoStatus = YES
- lastVisitDate = date is present and within reporting period (12 months)

NUMERATOR REQUIREMENTS:

Patients in the denominator are numerator compliant when:

TobaccoStatusAssessmentDate = date is present and within reporting period (12 months)

AND

TobaccoCessationAdviceOrTreatmentDate = date is present and within reporting period (12 months)

SCORING

Score=(numerator/denominator) x Total Possible Points

Documentation of Tobacco Cessation counseling if user – and Treatment

DENOMINATOR REQUIREMENTS:

Patients are included in the denominator when:

- PatientAge = 18 – 75
- HypertensionDiagnosis = YES
- TobaccoStatus = YES
- lastVisitDate = date is present and within reporting period (12 months)

NUMERATOR REQUIREMENTS:

Patients in the denominator are numerator compliant when:

TobaccoStatusAssessmentDate = date is present and within reporting period (12 months)

AND

TobaccoCessationAdviceOrTreatmentDate = date is present and within reporting period (12 months)

SCORING

Score=(numerator/denominator) x Total Possible Points

Body Mass Index and Nutrition Counseling

DENOMINATOR REQUIREMENTS:

Patients are included in the denominator when:

- PatientAge = 18 – 75
- HypertensionDiagnosis = YES
- lastVisitDate = date is present and within reporting period (12 months)

NUMERATOR REQUIREMENTS:

Patients in the denominator are numerator compliant when:

BMI = ≤ 25

AND

BMI Date = date is present and within reporting period (12 months)

OR

BMI = > 25

AND

BMI Date = date is present and within reporting period (12 months)

SCORING

Score = $(\text{numerator} / \text{denominator}) \times \text{Total Possible Points}$

Nutrition Counseling for Low Salt (DASH) Diet

DENOMINATOR REQUIREMENTS:

Patients are included in the denominator when:

- PatientAge = 18 – 75
- HypertensionDiagnosis = YES
- lastVisitDate = date is present and within reporting period (12 months)

NUMERATOR REQUIREMENTS:

Patients in the denominator are numerator compliant when:

DashDietCounseling = YES

AND

DashDietDate= date is present and within reporting period (12 months)

AND

DASHSodiumCounseling = YES

AND

DASHSodiumDate= date is present and within reporting period (12 months)

AND

activityStatus= Active or Not Active

AND

activityStatusDate= date is present and within reporting period (12 months)

AND

activityCounseling= YES

AND

activityCounselingDate= date is present and within reporting period (12 months)

SCORING

Score=(numerator/denominator) x Total Possible Points